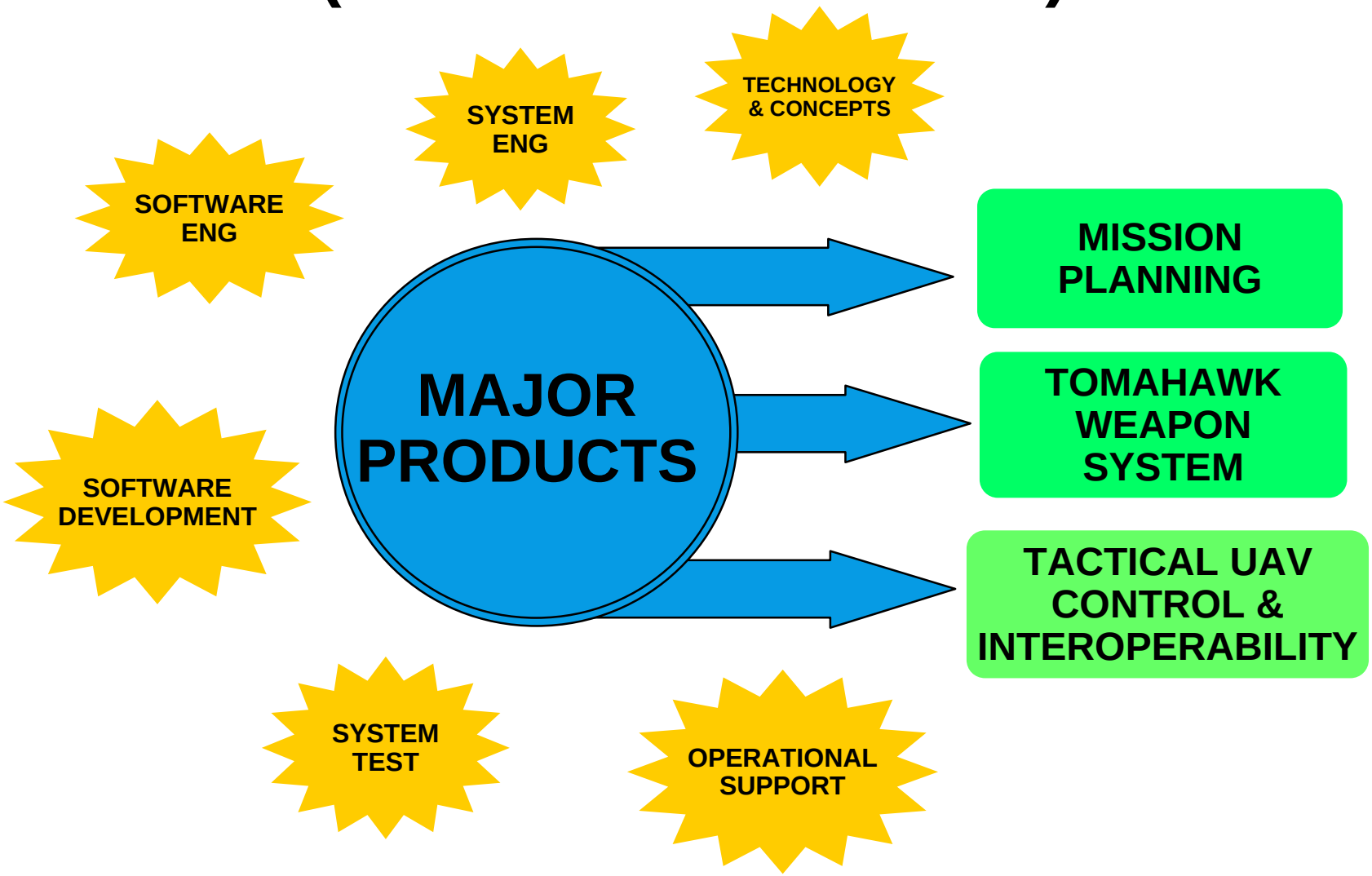
Program Executive Office (Cruise Missile & UAV)



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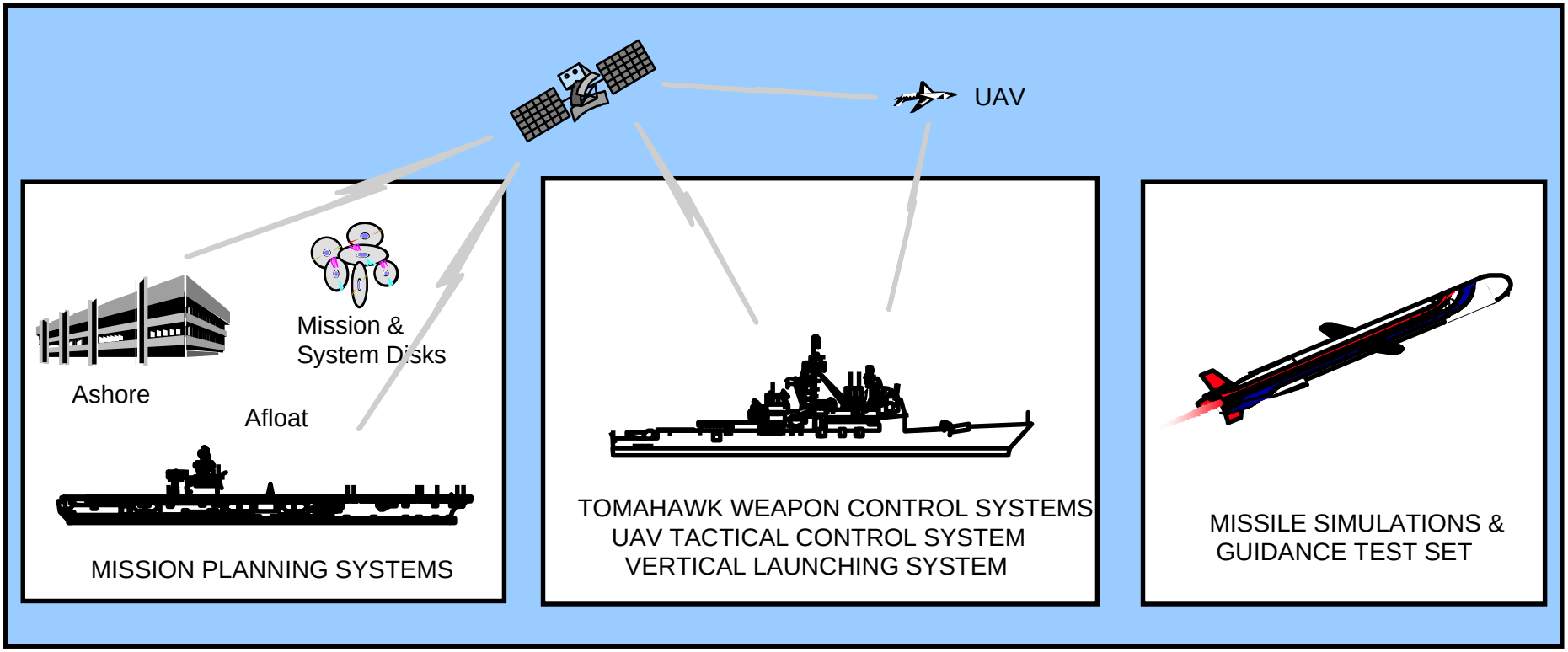
STRIKE WARFARE SYSTEMS INTEGRATION LAB



Supported Commander Operational Test and Evaluation Force's (ComOpTEvFor's) evaluation of:

Advanced Tomahawk Weapon Control System (ATWCS) Track Control Group - Replacement (TCG-R), OT-IIJ, and

Developmental Test (DT) Assist of AEGIS/Tomahawk Command and Decision (C&D) communications

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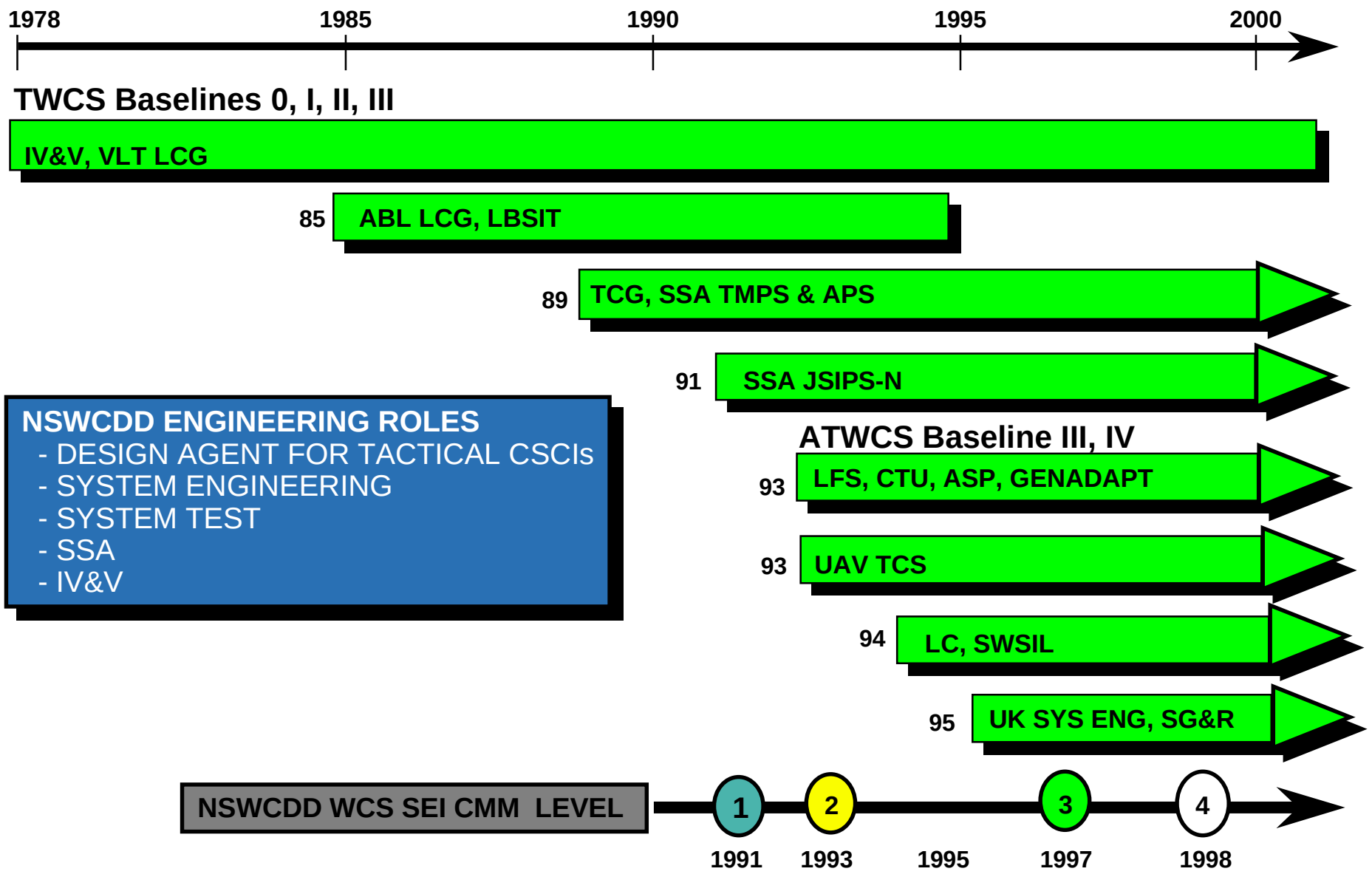
NSWCDD RESPONSIBILITIES



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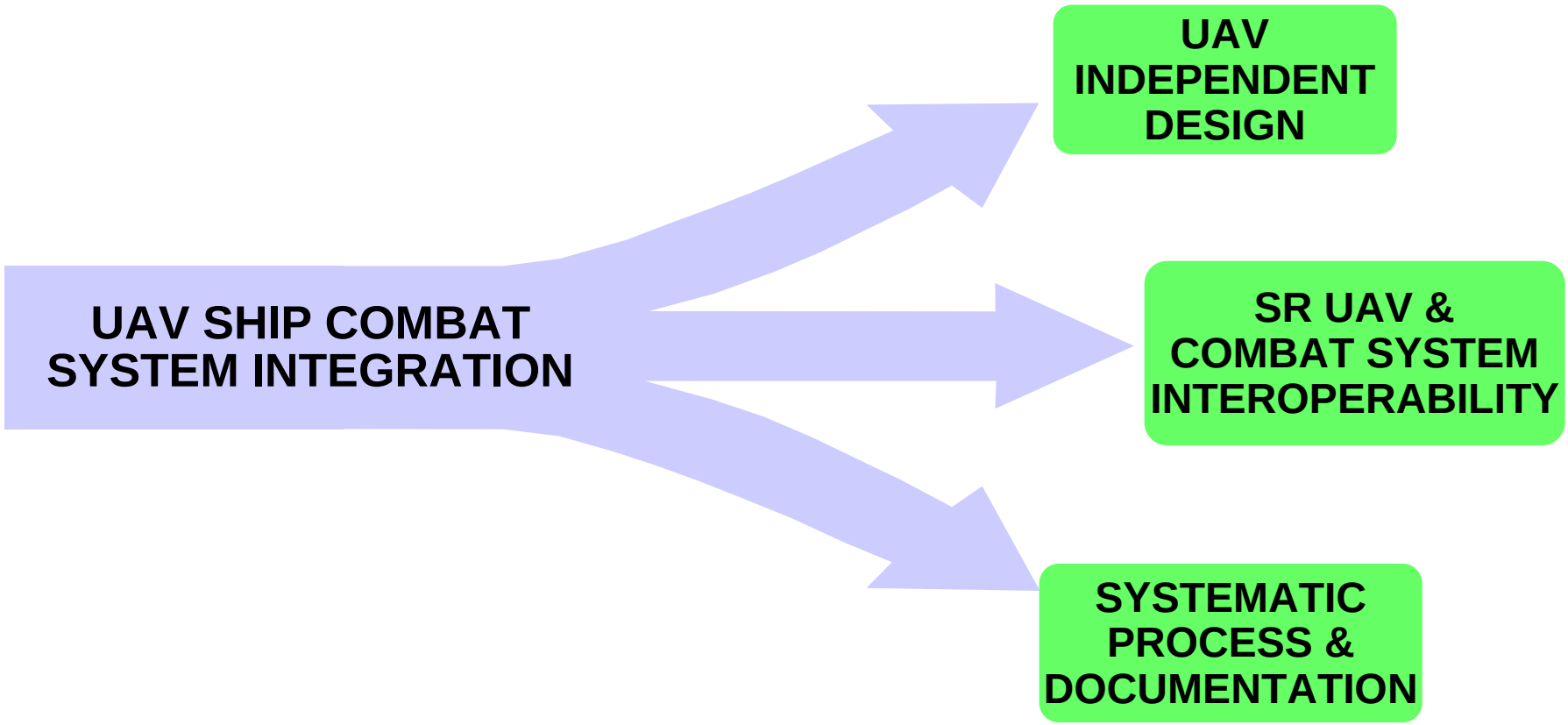
UAV SHIP COMBAT SYSTEM INTEGRATION

Program Objectives



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UAV SHIP COMBAT SYSTEM INTEGRATION Program Drivers

- **DEMONSTRATE INTEROPERABILITY WITH SR UAV SYSTEM**
  - **USE HUNTER BLOCK 0 AIR VEHICLE WITHOUT MODIFICATIONS**
- **DEMONSTRATE INTEGRATION OF UAV INTO COMBAT SYSTEMS**
  - **USE ATWCS HARDWARE ENVIRONMENT**
  - **USE ATWCS SOFTWARE ENVIRONMENT**
  - **USE EXISTING SHIPBOARD LINK (LAMPS MK III)**
  - **INTEGRATE UAV SYSTEM INTO AEGIS, DD-963 & L- CLASS COMBAT SYSTEMS**

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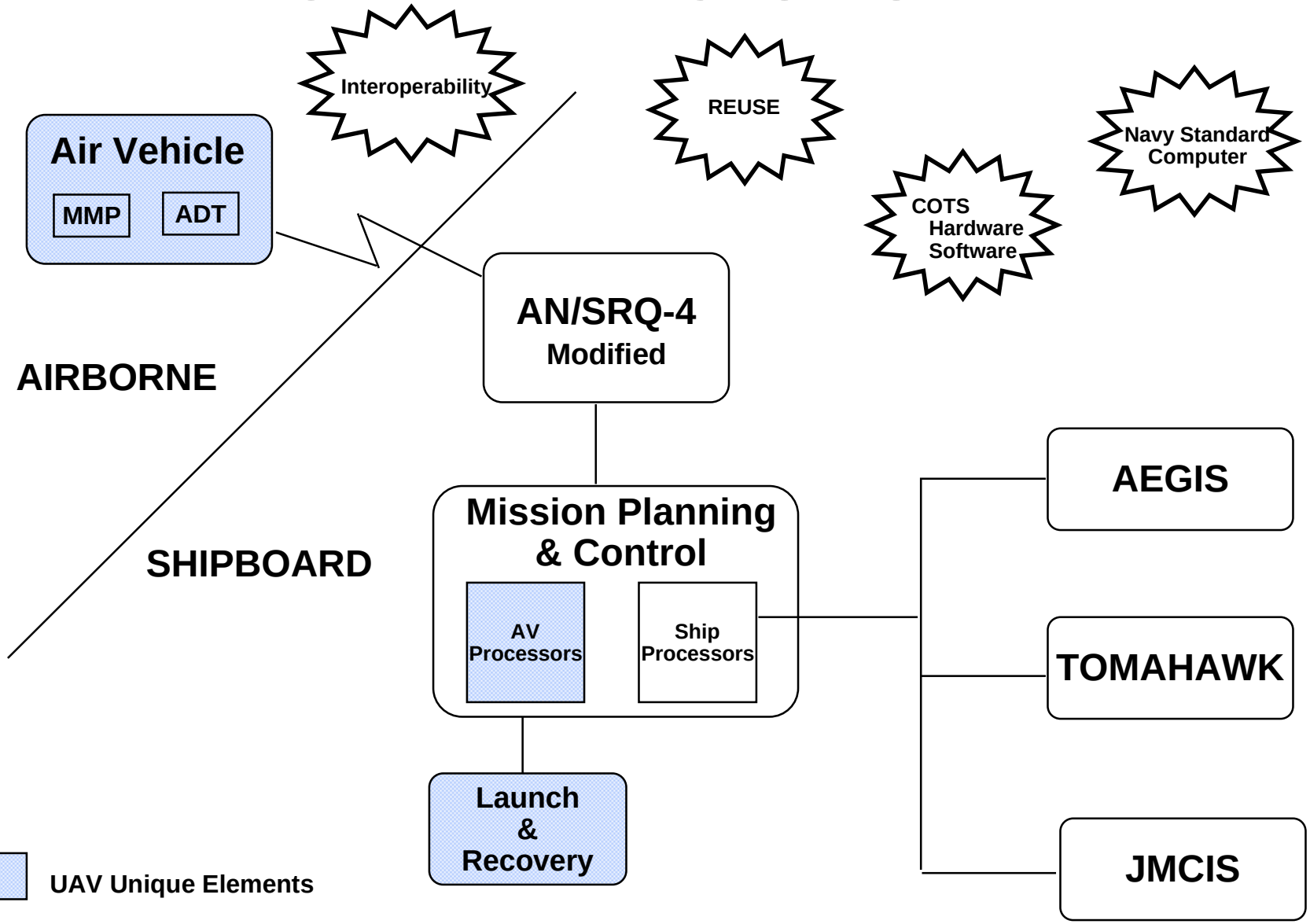
PROTOTYPE SHIP UAV DEMO SYSTEM



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UAV SHIP COMBAT SYSTEM INTEGRATION Test Concept

"Build a Little - Test a Little"

PS UAV DS System Flight Tests

PS-UAV DS Data Link Tests

PS-MPCS Integration Tests

PS-MPCS Unit Tests

Learn a Lot --> Risk Mitigation

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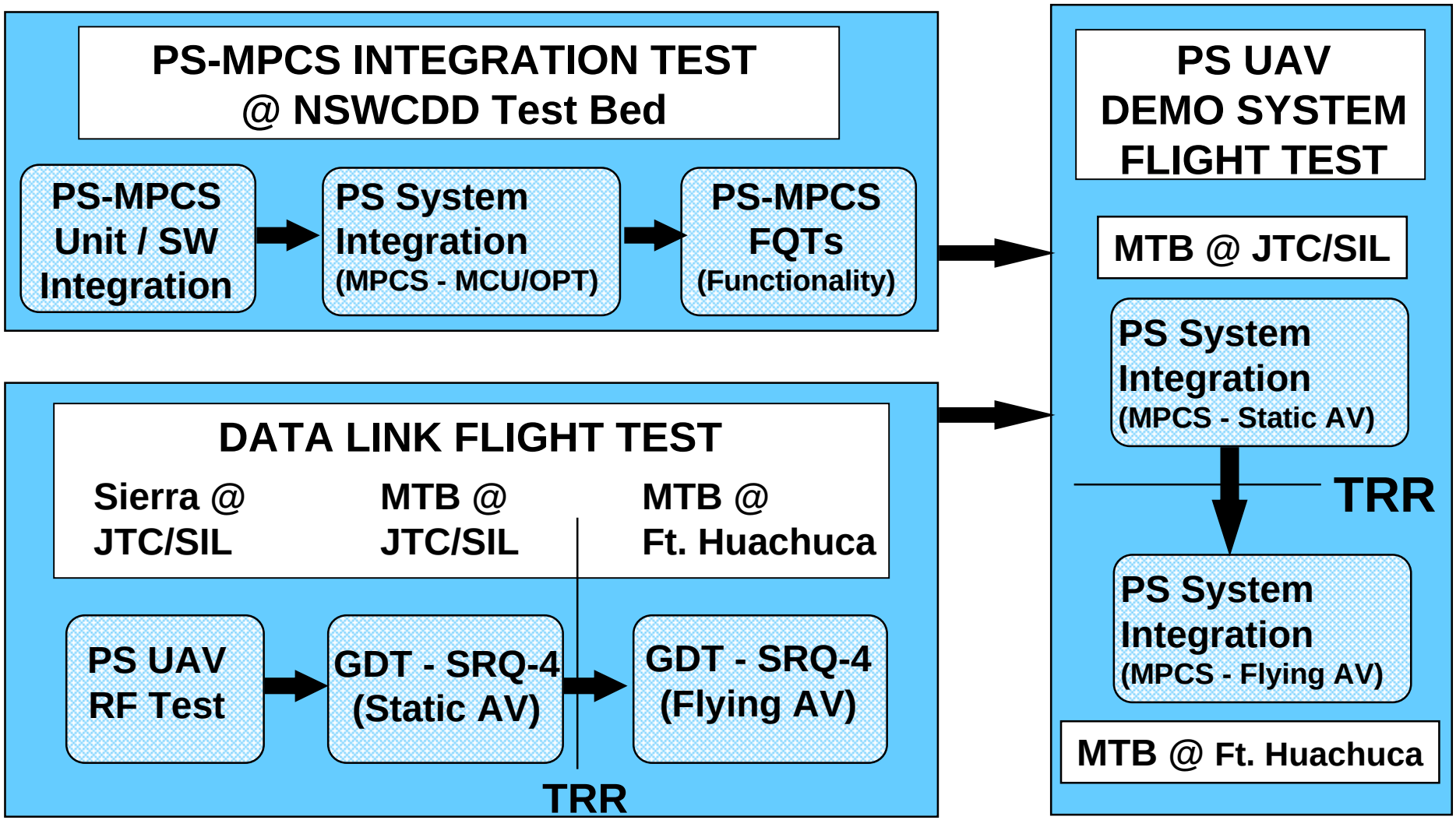
UAV SHIP COMBAT SYSTEM INTEGRATION Test Approach



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TCS CONCEPT

Tactical Control System
TCS
JPO•UAV

AIR VEHICLES

PAYLOADS

TACTICAL UAV CONTROL SYSTEM

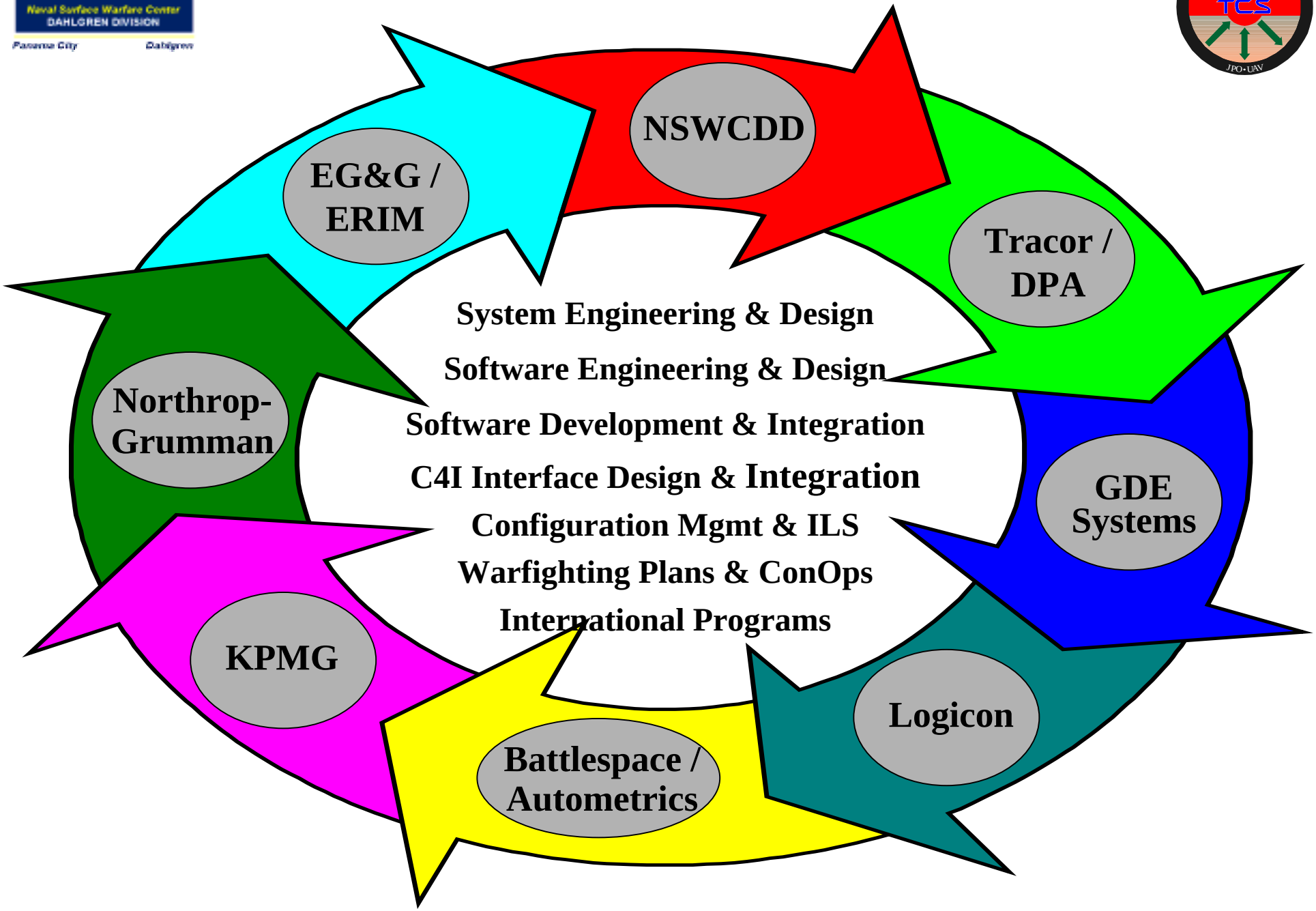
Connects the Air Vehicles & Payloads to the Users

Reconnaissance

Surveillance

Planning

Planning

Battle Damage Assessment

NSWCDD TCS TEAM